

Inventor: MATTINGLEY ET AL
Serial No.: 10/520,943
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Examiner: Michael Bernshteyn
Group Art Unit: 1713

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for producing a porous polymeric membrane which process comprises:
 - a) preparing a solution comprising a polymer which comprises vinylidene fluoride in a solvent/non-solvent mixture in which the proportion of non-solvent is 2 to 30 wt% by dispersing the polymer in the non-solvent prior to addition of the solvent wherein the boiling point of the non-solvent is higher than that of the solvent;
 - b) holding the solution at an elevated temperature of at least 40°C until the polymer is completely solvated;
 - c) casting the solution to form a thin layer; and
 - d) drying the thin layer to form a membrane.
2. (Original) Process according to claim 1 wherein the solution comprises polyvinylidene fluoride (PVdF).
3. (Previously Presented) Process according to claim 1 wherein the solvent is N,N-dimethylformamide (DMF), N,N-dimethylacetamide (DMA) or N-methyl-2-pyrrolidone (NMP).
4. (Previously Presented) Process according to claim 1 wherein the non-solvent is octanol, decanol, dodecanol or a mixture thereof.
5. (Previously Presented) Process according to claim 1 wherein the solution is solvated for up to 14 days.

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6. (Previously Presented) Process according to claim 1 wherein mono-unsaturated carboxylic, sulphonic or phosphonic acid, ester or amide groups are grafted onto the vinylidene fluoride.

7. (Previously Presented) A membrane produced by the process according to claim 1.

8. (Previously Presented) A laminate comprising a membrane produced according to the process of claim 1.

9. (Currently Amended) A method of making a battery by incorporating therein Use of a membrane produced according to the process of claim 1 ~~in a battery.~~

10. (Currently Amended) A method of making a fuel cell by incorporating therein Use of a membrane produced according to the process of claim 1 ~~in a fuel cell.~~

11. (Currently Amended) A method of making a fuel cell by incorporating therein Use of a laminate according to claim 8 ~~in a fuel cell.~~

12. (Currently Amended) A method of making a battery by incorporating therein Use of a membrane according to claim 7 ~~in a battery.~~

13. (Currently Amended) A method of making a battery by incorporating therein Use of a laminate according to claim 8 ~~in a battery.~~